

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (*Currently Amended*) An electrode for a fuel cell comprising:

a catalyst layer; and

a porous-polymer having numerous pores therein of the porous polymer material itself,

~~wherein said catalyst layer contains a solid polymer electrolyte and catalyst particles, and~~

said porous-polymer ~~does not substantially contain anything except its polymer material,~~

does not substantially have an ion-exchange function and is provided in a portion of pores of said
catalyst layer or both in said portion and on a surface of said catalyst layer,

said numerous pores are substantially formed by only said polymer, and

said catalyst layer contains a solid polymer electrolyte and catalyst particles.
2. (*Cancelled*).
3. (*Currently Amended*) An electrode for a fuel cell comprising:

a catalyst layer;

a gas diffusion layer; and

a porous-polymer having numerous pores therein of the porous polymer material itself,

~~wherein said catalyst layer contains a solid polymer electrolyte and catalyst particles,~~

said gas diffusion layer contains an electro-conductive porous substrate, ~~and~~

said porous polymer ~~does not substantially contain anything except its polymer material,~~
does not substantially have an ion-exchange function and is provided in a portion of pores of said
catalyst layer or an inside portion of said substrate,

said numerous pores are substantially formed by only said polymer, and

said catalyst layer contains a solid polymer electrolyte and catalyst particles.

4-5. *(Cancelled)*.

6. *(Currently Amended)* The electrode according to claim 1 or 3, wherein said numerous
pores of ~~said porous polymer~~ form a three-dimensional network structure.

7. *(Currently Amended)* The electrode according to claim 1 or 3, wherein an average
diameter of said numerous pores in ~~said porous polymer~~ is 1 μm or less.

8. *(Currently Amended)* The electrode according to claim 1 or 3, wherein an average
diameter of said numerous pores in ~~said porous polymer~~ is 0.05 μm or less.

9. *(Currently Amended)* The electrode according to claim 1 or 3, wherein a porosity of
said porous polymer having numerous pores is within a ~~the~~ range of 45% to 95%.

10. (*Currently Amended*) The electrode according to claims 1 or 3, wherein said ~~porous~~ polymer having numerous pores is fluorocarbon polymer.

11-20. (*Cancelled*).

21. (*New*) The electrode according to claim 1 or 3, wherein said polymer having numerous pores does not substantially contain anything except its polymer material.

22. (*New*) The electrode according to claim 3, wherein said polymer is provided in both a portion of pores of said catalyst layer and an inside portion of said substrate.

23. (*New*) An electrode for a fuel cell comprising:
a catalyst layer; and
a porous polymer, wherein said porous polymer does not substantially have an ion-exchange function and is provided in a portion of pores of said catalyst layer or on a surface of said catalyst layer,
said porous polymer is obtained by a phase inversion process, and
said catalyst layer contains a solid polymer electrolyte and catalyst particles.

24. (*New*) An electrode for a fuel cell comprising:

a catalyst layer;

a gas diffusion layer; and

a porous polymer, wherein said gas diffusion layer contains an electro-conductive porous substrate,

said porous polymer does not substantially have an ion-exchange function and is provided in a portion of pores of said catalyst layer or an inside portion of said substrate,

said porous polymer is obtained by a phase inversion process, and

said catalyst layer contains a solid polymer electrolyte and catalyst particles.

25. (*New*) The electrode according to claim 23 or 24, wherein pores of said porous polymer form a three-dimensional network structure.

26. (*New*) The electrode according to claim 23 or 24, wherein an average diameter of pores in said porous polymer is 1 μm or less.

27. (*New*) The electrode according to claim 23 or 24, wherein an average diameter of pores in said porous polymer is 0.05 μm or less.

28. *(New)* The electrode according to claim 23 or 24, wherein a porosity of said porous polymer is within a range of 45% to 95%.

29. *(New)* The electrode according to claim 23 or 24, wherein said porous polymer is a fluorocarbon polymer.

30. *(New)* The electrode according to claim 23 or 24, wherein said porous polymer does not substantially contain anything except its polymer material.

31. *(New)* The electrode according to claim 23 or 24, wherein said porous polymer is provided in a portion of pores of said catalyst layer.

32. *(New)* The electrode according to claim 23, wherein said porous polymer is provided in both a portion of pores of said catalyst layer and on a surface of said catalyst layer.

33. *(New)* The electrode according to claim 24, wherein said porous polymer is provided in both a portion of pores of said catalyst layer and an inside portion of said substrate.